




## **GSP100665, GSP100750 and GSP100755**

### Older Classic Controller Change

**TIP – Before you start, take a digital picture of the base of your machine so that you have a record of where wires are placed as a reference for re fitting should you need it.**

In order to remove and fit a new controller you will need to follow these guidelines.

1. Disconnect the spade connectors from the motor noting where the red one goes vs. the black one for later.
2. Carefully cut the cable tie around the motor, make sure you cut the cable tie and not the cable!
3. Looking from behind the machine, you will see a nut to the right hand side of the barrel controller. If you look closely you will see that the end of the thread that this nut goes around has a slot. Carefully undo the nut whilst holding the thread still with a cross head screwdriver.
4. Now unscrew the thread noting the position of the spacer washers, these are prone to falling off as you pull the bolt out so beware and be ready to catch them.  
 **It is essential that the battery is not attached at any time during this operation as the bolt can cause a short circuit when not fully engaged.**
5. You can now pull the controller out towards you, on very old models it will simply come away as the bolt is removed, newer models have a shoulder bolt screwed into the motor and a slot in the controller, you will need to ease the controller forward to release it from the shoulder bolt.
6. Thread the cables of the new controller through the chassis of your trolley and pull them through to their rough intended final location and hold the controller into the in use position.
7. Carefully thread the bolt through the plastic side lug and the spacer washers (you may need three hands at this point so call for some help) and screw the bolt into the end of the motor through the internal part of the controller. This is a bit fiddly as you are working blind but patience will repay you. Once finger tight, use a screwdriver to tighten it firmly.
8. Now add the locking nut and washer onto the remaining exposed thread and tighten, firm but not too firm.
9. Now connect up the motor brushes, refer to your note about red and black positions and then tidy the wires with a cable tie (GSP100415).